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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,902	03/18/2006	Franz Eberhard	5367-183PUS	3334

27799 7590 02/12/2009

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EXAMINER	
GOLUB, MARCIA A	

ART UNIT	PAPER NUMBER
2828	

MAIL DATE	DELIVERY MODE
02/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,902	EBERHARD ET AL.	
	Examiner	Art Unit	
	MARCIA A. GOLUB	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *5-8 and 15-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,9-14,19 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTC-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Declaration

The declaration filed on 10/27/2008 under 37 CFR 1.131 has been considered but is ineffective to overcome the Stephens reference.

The Stephens reference is a U.S. patent or U.S. patent application publication of a pending or patented application that claims the rejected invention. An affidavit or declaration is inappropriate under 37 CFR 1.131(a) when *the reference is claiming the same patentable invention*, see MPEP § 715. If the reference and this application are not commonly owned, the reference can only be overcome by establishing priority of invention through interference proceedings. See MPEP Chapter 2300 for information on initiating interference proceedings. If the reference and this application are commonly owned, the reference may be disqualified as prior art by an affidavit or declaration under 37 CFR 1.130. See MPEP § 718.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Stephens et al. (6,728,275), hereinafter '275.

Figs 2 and 4 of '275 disclose:

1,11. "A circuit arrangement comprising a plurality of laser diode bars which are connected in series with one another and on which a specific operating voltage is in each case impressed during operation of the series circuit, comprising:

a bridging element [64] is connected in parallel with each laser diode bar [60], which bridging element, when the specific operating voltage is impressed on the

associated laser diode bar, transmits a smaller current than the laser diode bar or transmits no current and which bridging element switches over to such a low-impedance state that the laser diode bar is bridged as soon as the voltage drop across the laser diode bar exceeds the specific operating voltage by a predefined voltage value." (abstract)

2,12. "wherein the bridging element changes over to the state that bridges the laser diode bar as soon as the voltage impressed on the bridging element is at least 200 mV [about 1 V] higher than the specific operating voltage of the associated laser diode bar."

3,13. "wherein the bridging element has at least one diode which is forward-biased when the specific operating voltage is impressed on the associated laser diode bar and the diffusion voltage of which is at least 200 mV higher than the operating voltage of the associated laser diode bar." (4/37-63)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over '275 as applied to claims 1 and 11 above.

Figs 2 and 4 of '275 disclose a laser device with a bypass diode as described above but do not disclose:

4,14. "wherein the bridging element has a diode based on AlGaAs semiconductor material."

These materials/elements are known in the art to be used with lasers.

It would have been obvious to one or ordinary skill in the art at the time the of the invention to make the laser of these known materials/elements, since it has been held to be within the general skill of a worker in the art to select a known material/element on the basis of it's suitability for the intended use as a matter of obvious design choice. *In*

re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Claims 9, 10, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over '275 as applied to claims 1 and 11 above, and further in view of Mizuishi et al. (JP 60211992 found in IDS), hereinafter IDS1.

Figs 2 and 4 of '275 disclose a laser device with a bypass diode as described above, wherein the laser diode and the bypass diode are soldered to a heat sink, but do not disclose:

9,19. "wherein each laser diode bar and the associated bridging element are applied on a common heat sink, in that the bridging element is fixed on the heat sink by means of a first connecting means and the laser diode bar is fixed on the heat sink by means of a second connecting means, and in that the melting point of the first connecting means is at a higher temperature than that of the second connecting means."

10,20. "wherein the first connecting means is a hard solder and the second connecting means is a soft solder."

However, IDS1 discloses using soft solder and hard solder to connect different parts of the laser system.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of IDS1 into the device of '275 by attaching the laser diode to the heat sink with a soft solder and the bypass diode with a hard solder for at least the purpose of being able to interchange the faulty laser diode in the system without disturbing the rest of the components.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Info

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCIA A. GOLUB-MILLER whose telephone number is (571)272-8602. The examiner can normally be reached on M-Th 9:30-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marcia A. Golub-Miller/

/Minsun Harvey/
Supervisory Patent Examiner, Art Unit 2828